



US005926817A

United States Patent [19]
Christeson et al.

[11] **Patent Number:** 5,926,817
[45] **Date of Patent:** Jul. 20, 1999

- [54] **GRAPHICAL USER INTERFACE-BASED, CLIENT-SERVER SYSTEM AND METHOD FOR DECISION MAKING APPLICATIONS**
- [75] **Inventors:** William Christeson; Venkatesan Kailasam, both of Colorado Springs, Colo.; Atul Kedar, Falls Church, Va.; Praveen Khanna, Colorado Springs, Colo.; Darryl J. Temmel, Herndon; Paul W. Waldo, III, Powhatan, both of Va.
- [73] **Assignee:** MCI Communications Corporation, Washington, D.C.
- [21] **Appl. No.:** 08/581,679
- [22] **Filed:** Dec. 29, 1995
- [51] **Int. Cl.⁶** G06F 17/30
- [52] **U.S. Cl.** 707/10; 707/8; 707/104
- [58] **Field of Search** 395/601, 610; 707/10, 8, 104
- [56] **References Cited**

U.S. PATENT DOCUMENTS

4,692,858	9/1987	Redford et al.	364/200
5,185,857	2/1993	Rozmanith et al.	395/148
5,379,424	1/1995	Morimoto et al.	707/10
5,418,945	5/1995	Carter et al.	707/10
5,422,674	6/1995	Hooper et al.	348/409
5,463,381	10/1995	Ryu et al.	707/10
5,493,607	2/1996	Arumainayagam et al.	379/88
5,493,638	2/1996	Hooper et al.	395/135
5,493,728	2/1996	Solton et al.	707/10

5,495,602	2/1996	Harada et al.	707/10
5,504,893	4/1996	Kawashima et al.	707/10
5,504,921	4/1996	Dev et al.	707/10
5,506,984	4/1996	Miller	707/10
5,511,208	4/1996	Boyles et al.	395/800
5,519,858	5/1996	Walton et al.	707/10
5,542,072	7/1996	Kawashima et al.	707/10
5,553,280	9/1996	Fortier	707/10
5,566,069	10/1996	Clark, Jr. et al.	364/420
5,594,663	1/1997	Messaros et al.	364/550
5,619,555	4/1997	Fenton et al.	379/67
5,625,816	4/1997	Burdick et al.	395/614
5,629,978	5/1997	Blumhardt et al.	379/201
5,632,011	5/1997	Landfield et al.	395/326
5,758,126	5/1998	Daniels et al.	395/500
5,787,402	7/1998	Potter et al.	705/37

OTHER PUBLICATIONS

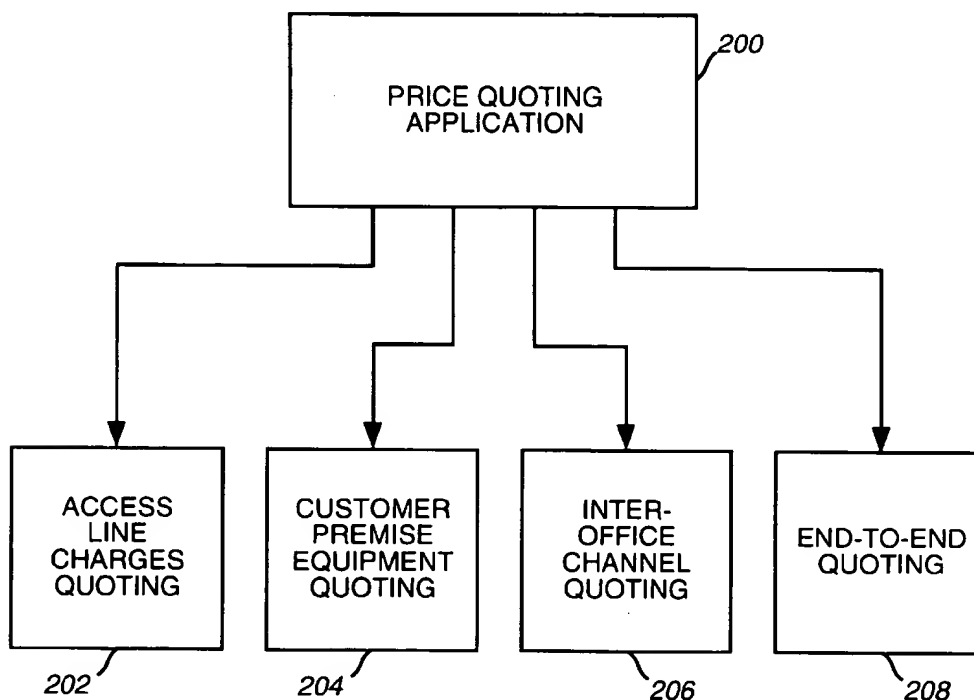
Date, C. J., ed., in: An Introduction to Database Systems, Addison-Wesley Publishing Company, Inc.: Reading, Mass., pp. 617-640 (1990).

Primary Examiner—Paul R. Lintz
Assistant Examiner—Frantz Coby

[57] **ABSTRACT**

A client-server system and method providing real time access to a variety of database systems, for decision making applications, such as dynamic price quoting, product/service configuration and ordering, and billing verification. The system and method uses a graphical user interface to provide a user transparent and seamless access to the database systems.

14 Claims, 20 Drawing Sheets



US-PAT-NO: 5926817

DOCUMENT-IDENTIFIER: US 5926817 A

TITLE: Graphical user interface-based, client-server system and
method for decision making applications

----- KWIC -----

Drawing Description Text - DRTX (8):

FIG. 7 illustrates an ALCC Access Volume Discounts (AVD) Notebook Page;

Detailed Description Text - DETX (8):

The preferred embodiment provides the service company representative with a graphical user interface (GUI) which is used to more efficiently quote the customer various types of telecommunication line configurations and rate charge with respect to ALCC, CPE, IOC, and ETE charges as well as pricing plan and access volume discount information. More particularly, the preferred embodiment is a client-server system and method with user friendly graphical inquiry capabilities for real time, transparent access to distributed databases containing the requisite price quoting information. In addition, the preferred embodiment provides the representative with informational data of mandatory and optional features.

Detailed Description Text - DETX (30):

To view/select ALCC features, rates, or discounts for a quote, the representative selects <Details> push button 406 on ALCC Line Charge Quoting spreadsheet screen 400. In response, a notebook 500 appears having a number of pages, including a ALCC Features page 502, a ALCC Accessing Pricing Plan (APP) page 504, a ALCC Access Volume Discounts (AVD) page 506, and a ALCC Penalties page 514, as presented in FIGS. 5-8/Tables 3-6. ALCC Features notebook page 502 displays the required and optional ALCC features and charges for the selected quote. The representative at this junction may deselect any

optional feature(s) which is/are not desired. The preferred embodiment, in response, correspondingly subtracts the deselected feature's rates from the overall ALCC quote.

Claims Text - CLTX (40):

13. A client-server computer system for providing a user with the ability to configure a product and/or service, wherein the client-server computer system further includes a graphical user interface (GUI) for providing **real-time price** quoting summary information, comprising: